

Amendments to the Claims

1) (CURRENTLY AMENDED) A structured surfactant composition capable of suspending solids which comprises surfactant, water and, if required, electrolyte in relative proportions adapted to form a flocculated, dispersed lamellar and/or spherulitic structured surfactant system, and, in addition, a sufficient amount of a deflocculant to inhibit the flocculation of said system characterised in that said deflocculant comprises a water-soluble carbohydrate.

2) (ORIGINAL) A composition according to claim 1 where said carbohydrate is an alginate present in a proportion of from 0.05% to 5% by weight based on the weight of the composition.

3) (ORIGINAL) A composition according to claim 1 wherein said carbohydrate is a mono or disaccharide or derivative thereof in a proportion of from 10 to 20% by weight based on the weight of the composition.

4) (CURRENTLY AMENDED) A detergent composition comprising :-

- (A) 20 to 75% by weight of the composition of water;
- (B) At least 3% based on the weight of the composition, preferably 4 to 10%, surfactant comprising more than 50% based on the total weight of surfactant of non-ionic surfactants having a mean HLB of from 10 to 15 and optionally a smaller proportion of anionic and/or amphoteric surfactant;
- (C) At least 10% by weight based on the weight of the composition of builders;
- (D) At least 7% based on the weight of the composition of dissolved non-micelle-forming salts and bases which dissociate at least partially in solution into ions, including any dissolved portion of said builder;
- (E) A total free alkalinity of at least 0.5 normal;
- (F) A sufficient amount ~~Sufficient~~ of a deflocculant to provide, in conjunction with components A to E above a pourable composition which does not separate after 1 month at 25° C;

Wherein said deflocculant comprises a water soluble carbohydrate.

Claim Rejections under 35 USC § 102

The 10/27/03 Office Action in the present application indicates that claim 1 is rejected under 35 USC § 102(e) as being anticipated by Asano et al., US 6,136,769 stating that:

"Asano et al teach a liquid-gel dishwashing detergent comprising 16.5 % citric acid, 25 % sodium/potassium carbonate, 1.8 % anionic/nonionic/cationic surfactant, 6% sorbitol, and the balance water (col. 59, example XVII, formulation D). As this reference meets all material limitations of the claims at hand, the reference is anticipatory."

Applicant notes that in order for a rejection under 35 USC 102 to be proper, "the reference must teach every aspect of the claimed invention" (MPEP rev. 1, February 2003; 706.02(a) pp. 700-21, col. 1 under the heading "**DISTINCTION BETWEEN 35 USC 102 AND 103**".) Applicant's claimed compositions defined by claim 1 are structured surfactant compositions which are dispersed lamellar and/or spherulitic structured surfactant systems. The Asano et al reference teaches the use of alkoxylated quaternary ammonium ("AQA") surfactants in various end uses. However, the Asano et al reference makes no mention that the surfactant systems which it provides are structured aqueous systems, and no mention is made of spherulites or lamellae. Further, the teaching of Asano et al. is wholly devoid of the words "spherulite", "spherulitic", and "lamellar". Applicant's claim 1 includes the language "lamellar and/or spherulitic structured surfactant system" as a limitation.

Further, Asano et al does not provide the surfactant, water, and electrolyte to form a flocculated, dispersed structured system. Applicant's claim 1 requires this.

Therefore, the Asano et al reference does not teach every feature of Applicant's claimed invention, and the rejection of claim 1 under 35 USC § 102(e) based on the Asano et al reference

should be withdrawn.

The 10/27/03 Office Action in the present application indicates that claim 1 is rejected under 35 USC § 102(e) as being anticipated by Murphy, US 6,077,317 stating that:

"Murphy teaches a heavy duty liquid detergent comprising 5% sodium citrate, 32% anionic/nonionic surfactant, 4.5 % sorbitol, and the balance water (col. 13, example IX). As this reference meets all material limitations of the claims at hand, the reference is anticipatory."

Applicant's claimed compositions defined by claim 1 are structured surfactant compositions which are dispersed lamellar and/or spherulitic structured surfactant systems. Murphy teaches the use of siloxane based surfactants as wetting agents to provide improved penetration of the composition into a stained area. However, the Murphy reference makes no mention that the surfactant systems which it provides are structured aqueous systems, and no mention is made of spherulites or lamellae. Further, the teaching of Murphy is wholly devoid of the words "spherulite", "spherulitic", and "lamellar". Applicant's claim 1 includes the language "lamellar and/or spherulitic structured surfactant system" as a limitation.

Further, Murphy, like all of the references cited in the 10/27/03 Office Action, does not provide the surfactant, water, and electrolyte to form a flocculated, dispersed structured system containing a water soluble carbohydrate as deflocculant. Applicant's claim 1 requires this.

Therefore, the Murphy reference does not teach every feature of Applicant's claimed invention, and the rejection of claim 1 under 35 USC § 102(e) based on the Murphy reference should be withdrawn.

The 10/27/03 Office Action in the present application indicates that claim 1 is rejected under 35 USC § 102(e) as being anticipated by Bae-Lee et al., US 6,159,918 stating that:

"Bae-Lee et al teach a liquid detergent comprising 6% sodium citrate, 32% anionic/nonionic surfactant, 6% sorbitol, and the balance water (col. 14, table 1). As this reference meets all material limitations of the claims at hand, the reference is anticipatory."

Applicant's claimed compositions defined by claim 1 are structured surfactant compositions which are dispersed lamellar and/or spherulitic structured surfactant systems. Bae-Lee et al teaches the utility of an unexpectedly small amount of f-dye or UV absorber, when added to a liquid that contains enzymes, has the ability to dramatically reduce the loss of activity by UV light. However, the Bae-Lee et al reference makes no mention that its surfactant systems are structured aqueous systems, and no mention is made of spherulites or lamellae. Further, the teaching of Bae-Lee et al is wholly devoid of the words "spherulite", "spherulitic", and "lamellar". Applicant's claim 1 includes the language "lamellar and/or spherulitic structured surfactant system" as a limitation.

Further, Bae-Lee et al does not provide the surfactant, water, and electrolyte to form a flocculated, dispersed structured system. Applicant's claim 1 requires this.

Therefore, the Bae-Lee et al reference does not teach every feature of Applicant's claimed invention, and the rejection of claim 1 under 35 USC § 102(e) based on the Bae-Lee et al reference should be withdrawn.

The 10/27/03 Office Action in the present application indicates that claims 1 and 3 are rejected under 35 USC § 102(b) as being anticipated by Tsaur et al., US 5,281,355 stating that:

"Tsaur et al teach a structured liquid detergent comprising up to 30% sodium citrate/nitriloacetate, up to 56 % anionic/nonionic surfactant, up to 15% sorbitol, and the balance water (col. 20, lines 40-58). As this reference meets all material limitations of the claims at hand, the reference is anticipatory."

Applicants note that Tsaur et al makes no mention of the surfactant, water and electrolyte being present in relative proportions adapted to form a flocculated, dispersed structured surfactant system, as is specified as a necessary limitation in Applicants' instant claim 1. The retrospective view of inherency cannot serve as substitute for actual teaching or suggestion in prior art which supports selection and use of various elements in particular claimed combination. In re Newell 13 USPQ 2^d 1248 (Fed. Cir. 1989). Thus, Tsaur et al does not teach every limitation of Applicants' claim 1, and the rejection of claim 1 and claim 3 dependent thereon under 35 USC §102(b) based on the Tsaur et al reference should be reconsidered and withdrawn.

The 10/27/03 Office Action in the present application indicates that claim 1 is rejected under 35 USC § 102(b) as being anticipated by Panandiker et al., US 5,468,414 stating that:

"Panandiker et al teach a heavy duty liquid detergent comprising citric acid, anionic/nonionic/cationic surfactant, 4% sorbitol, and the balance water (col. 21, example 9). Another example comprises citric acid, anionic/nonionic/cationic surfactant, 4% sucrose, and the balance water (col. 21, example 10). As this reference meets all material limitations of the claims at hand, the reference is anticipatory."

Applicants' claimed compositions defined by claim 1 are structured surfactant compositions which are dispersed lamellar and/or spherulitic structured surfactant systems. Panandiker et al.

teaches liquid detergent compositions comprising vicinal polyols which comprise a vicinal polyol alkyl group or contain vicinal hydroxy groups attached to a benzene ring, in combination with boric acid or its derivative. However, the Panandiker et al reference makes no mention that its surfactant systems are structured aqueous systems, and no mention is made of spherulites or lamellae. Further, the teaching of Panandiker et al is wholly devoid of the words "spherulite", "spherulitic", and "lamellar". Applicant's claim 1 includes the language "lamellar and/or spherulitic structured surfactant system" as a limitation.

Further, Panandiker et al does not provide the surfactant, water, and electrolyte to form a flocculated, dispersed structured system. Applicant's claim 1 requires this.

Therefore, the Panandiker et al reference does not teach every feature of Applicant's claimed invention, and the rejection of claim 1 under 35 USC § 102(b) based on the Panandiker et al reference should be withdrawn.

The 10/27/03 Office Action in the present application indicates that claim 1 is rejected under 35 USC § 102(b) as being anticipated by Knowlton et al., US 5,712,239 stating that:

"Knowlton et al teach a liquid detergent comprising 9.7 % sodium citrate, 42 % anionic/nonionic surfactant, 16.1 % sorbitol, and the balance water (col. 10, table 1). As this reference meets all material limitations of the claims at hand, the reference is anticipatory."

Applicants' claimed compositions defined by claim 1 are structured surfactant compositions which are dispersed lamellar and/or spherulitic structured surfactant systems.

Applicant's claim 1 includes the language "lamellar and/or spherulitic structured surfactant system" as a limitation. The compositions of Knowlton et al are not structured liquids as col. 3,

lines 16-18 show, that the compositions of Knowlton et al "may be used in" lamellar structured liquids. Being "used in" a structured liquid is different from being a structured liquid.

Another aspect in which the compositions of Knowlton et al fall short in being anticipatory to Applicant's claims is that the deflocculating polymer of Knowlton et al (col. 9, line 23) is not specified as comprising a water-soluble carbohydrate, as required in Applicant's claims. The polymers described as deflocculating polymers in Knowlton et al are specified at col. 9, lines 27-40. The Knowlton et al reference does not describe the use of a water-soluble carbohydrate as a deflocculant either alone or in combination with all of the other limitations in Applicants' claims. Therefore, the rejection of claim 1 under 35 USC 102(b) based on the Knowlton et al reference should be reconsidered and withdrawn.

The 10/27/03 Office Action in the present application indicates that claim 1 is rejected under 35 USC § 102(b) as being anticipated by Falk et al., US 5,723,434 stating that:

"Falk et al teach a liquid detergent comprising 5% sodium citrate, 30% anionic/nonionic surfactant, 4.5% sorbitol, and the balance water (col. 23, example 9). As this reference meets all material limitations of the claims at hand, the reference is anticipatory."

Applicants' claim 1 compositions require the presence of a flocculated structured system which also contain a deflocculant, wherein the deflocculant is a water-soluble carbohydrate. Falk et al do not teach a flocculated structured system. Further, the carbohydrates present in Falk et al. are used as hydrotropes (col. 9, lines 6-18). Since the Falk et al. reference does not teach every limitation of Applicants claim 1, the rejection of claim 1 under 35 USC 102(b) should be reconsidered and withdrawn.

The 10/27/03 Office Action in the present application indicates that claims 1 and 2 are rejected under 35 USC § 102(b) as being anticipated by Ouhadi et al. stating that:

"Ouhadi et al teach a heavy duty liquid detergent comprising 10% nonionic surfactant, and 5% alkali metal alginic acid builder salt (col. 18, claim 1). As this reference meets all material limitations of the claims at hand, the reference is anticipatory."

Applicants respectfully submit that the Ouhadi et al reference does not meet all limitations of claims 1 and 2, and the rejection of these claims under 35 USC 102(b) should be reconsidered and withdrawn. The compositions disclosed in Ouhadi et al are non-aqueous (ass Abstract, & claims). Applicant's claimed compositions contain water as a claim limitation.

The 10/27/03 Office Action in the present application indicates that claim 1 is rejected under 35 USC § 102(e) as being anticipated by Hsu et al., stating that:

"Hsu et al. teach a liquid detergent comprising sodium citrate, anionic/nonionic surfactant, sorbitol solution, and the balance water (col. 21, example 7). As this reference meets all material limitations of the claims at hand, the reference is anticipatory."

Applicants respectfully submit that the Hsu et al reference does not meet all limitations of Applicants claim 1, and the rejection of claim 1 under 35 USC 102(e) should be reconsidered and withdrawn. In particular, Hsu et al is concerned with formation of a non-continuous network suspending system (col. 1, lines 23-25) which contain 15 % or greater, preferably 20 to 85% surfactant, which comprises suspending gum polymers stable in a high surfactant environment. Hsu et al provides a process as described col. 3, lines 33-67. All of the limitations in instant claim 1 are not present in the Hsu et al. Hsu et al does not teach a flocculated, dispersed lamellar

and/or spherulitic structured surfactant system, as Applicants instant claim 1 is so limited. Hsu et al is a gum based system, and the Office is referred to the paragraph in col. 1 which begins at line 43 and is concerned with structured liquid systems, and compare and contrast this to the teachings of the paragraph beginning in col. 1, line 59 which is concerned with gum-based systems. The invention of Hsu et al deals with the latter, and is not concerned with structured liquids, but rather with gum based systems, as evident from the description and claims (col. 25, line 24, inter alia). Thus, the rejection of claim 1 under 35 USC 102(e) should be reconsidered and withdrawn.

The 10/27/03 Office Action in the present application indicates that claims 1 and 2 are rejected under 35 USC § 102(b) as being anticipated by Zelger, US 5,429,767 stating that:

"Zelger teaches a storage-stable liquid detergent comprising 0.2% sodium alginate (col. 5, example 2). As this reference meets all material limitations of the claims at hand, the reference is anticipatory."

Applicants respectfully disagree. All of the elements of Applicant's claims 1 and 2 are not contained in the prior art reference of Zelger. Specifically, none of the compositions of Zelger are structured surfactant compositions which are flocculated dispersed lamellar and/or spherulitic structured surfactant systems which comprise a deflocculant which is a water-soluble carbohydrate. Thus, the rejection of claims 1 and 2 under 35 USC § 102(b) based on the Zelger reference should be reconsidered and withdrawn.

Claim Rejections under 35 USC § 103

The 10/27/03 Office Action in the present application indicates that claims 1, 3, and 4 are rejected under 35 USC § 103(a) as being unpatentable over Tsauro et al, US 5,281,355 stating that:

"Tsauro et al are relied upon as set forth above. The specific proportions of components set forth in present claim 4 are not taught by Tsauro et al, however, as these proportions are overlapped by the teachings of the reference, it would have been obvious to one of ordinary skill in the art to prepare a structured detergent which meets the limitations of present claim 4 based on the teachings of Tsauro et al."

Applicants note that with regards to the making a *prima facie* case of obviousness under 35 USC §103(a), MPEP section 706.02(j) sets forth the three basic criteria which **all must be met**:

"1) There must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings;
2) there must be reasonable expectation of success; and
3) the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based upon applicant's disclosure."

Applicant respectfully submit that a *prima facie* case of obviousness has not been made, and that the rejection of claims 1, 3, and 4 should be reconsidered and withdrawn.

The conclusion of obviousness asserted in the Office Action was stated as: "it would have been obvious to one of ordinary skill in the art to prepare a structured detergent which meets the limitations of present claim 4 based on the teachings of Tsauro et al". What preceded this conclusion was : "The specific proportions of components set forth in present claim 4 are not taught by Tsauro et al, however, as these proportions are overlapped by the teachings of the

reference".

Tsaur et al makes no mention of the surfactant, water and electrolyte being present in relative proportions adapted to form a flocculated, dispersed structured surfactant system, as is specified as a limitation in Applicants' instant independent claims 1 and 4. Further, there is nothing contained in the prior art which teaches or even remotely suggests such a composition.

The retrospective view of inherency cannot serve as substitute for actual teaching or suggestion in prior art which supports selection and use of various elements in particular claimed combination. Further, Applicants submit that it is established that silence in a reference is not an adequate disclosure of facts from which a conclusion of novelty or obviousness may justifiably follow; and that obviousness cannot be predicated on the unknown. In re Newell 13 USPQ 2d 1248, 1250 (Fed. Cir. 1989); In re Burt, 148 USPQ 548 (CCPA 1966).

In Tsaur et al. the amount of sorbitol and several of the other ingredients in col. 20 are specified as being present from 0 to 15%, which enables sorbitol to be absent; hence sorbitol, unlike three of the other ingredients, is optional in Tsaur et al. and is not an essential ingredient, as in Applicants' instantly claimed compositions.

Further, Tsaur et al is devoid of the presence of electrolyte, which is also an element of Applicants' claims. The prior art provides no teaching, suggestion, or motivation to include an electrolyte into Tsaur et al.. Therefore, the rejection of claims 1, 3, and 4 under 35 USC 103(a) should be reconsidered and withdrawn.